Claims

What is claimed is:

1   1.   A method for providing distributed functionality over a network, comprising:

2   receiving a request to perform a task on a first digital information appliance, the task

3   requiring a resource not included on the first digital information appliance;

4   locating a second digital information appliance over a network, the second digital

5   information appliance including the resource;

6   transferring the request from the first digital information appliance to the second

7   digital information appliance so as to enable the task to be performed on the

8   second digital information appliance;

9   returning a result of the performed task by the second digital information appliance

10   to the first digital information appliance.

2.   The method for providing distributed functionality as described in claim 1, wherein the request is received by a first program object on the first digital information appliance and the task is performed by a second program object on the second digital information appliance.

3.   The method for providing distributed functionality as described in claim 2, wherein the first program object includes an interface dynamic base object and the second program object includes an implementation dynamic base object.

4.   The method for providing distributed functionality as described in claim 2, wherein locating includes utilizing an architecture administrator, the architecture administrator capable of at least one of finding and creating an instance of the second program object.

1　　　　　5.　　　The method for providing distributed functionality as described in claim 1,

2　wherein the second digital information appliance is specialized for performing the task.

1　　　　　6.　　　The method for providing distributed functionality as described in claim 1,

2　further comprising:

3　　　　　monitoring utilization of an appliance;

4　　　　　storing object utilization information for identifying previously performed tasks;

5　　　　　determining whether to utilize a previously performed task; and in the event it is

6　determined to utilize a previously performed task, loading a corresponding object for

7　executing the previously performed task.

　　　　　7.　　　The method for providing distributed functionality as described in claim 1,

wherein the request includes a transaction object, the transaction object suitable for

supplying billing information related to the performed task.

　　　　　8.　　　The system for providing distributed functionality as described in claim 7,

wherein the transaction object comprises a dynamic base object, the dynamic base object

including a transaction interface dynamic base object and a transaction implementation

dynamic base object.

1　　　　　9.　　　The system for providing distributed functionality as described in claim 7,

2　wherein the transaction interface dynamic base object is embedded in a request dynamic base

3　object and the transaction implementation dynamic base object resides on a third digital

4　information appliance

10.   A system for providing distributed functionality over a network, comprising:

a first digital information appliance; and

a second digital information appliance coupled to the first digital information appliance over the network

wherein the first digital information appliance receives a request to perform a task requiring a resource not included on the first digital information appliance,

locating the second digital information appliance over the network, the second digital information appliance including the resource;

transferring the request from the first digital information appliance to the second digital information appliance so as to enable the task to be performed on the second digital information appliance; and

returning a result of the performed task by the second digital information appliance to the first digital information appliance.

11.   The system for providing distributed functionality as described in claim 10, wherein the request is received by a first program object on the first digital information appliance and the task is performed by a second program object on the second digital information appliance.

12.   The system for providing distributed functionality as described in claim 11, wherein the first program object includes an interface dynamic base object and the second program object includes an implementation dynamic base object.

13.   The system for providing distributed functionality as described in claim 11, wherein locating includes utilizing an architecture administrator, the architecture administrator capable of at least one of finding and creating an instance of the second program object.

14.   The system for providing distributed functionality as described in claim 10, wherein the second digital information appliance is specialized for performing the task.

15.   The system for providing distributed functionality as described in claim 10, further comprising:

monitoring utilization of an appliance;

storing object utilization information for identifying previously performed tasks;

determining whether to utilize a previously performed task; and in the event it is determined to utilize a previously performed task, loading a corresponding object for executing the previously performed task.

16.   The system for providing distributed functionality as described in claim 10, wherein the request includes a transaction object, the transaction object suitable for supplying billing information related to the performed task.

17.   The system for providing distributed functionality as described in claim 16, wherein the transaction object comprises a dynamic base object, the dynamic base object including a transaction interface dynamic base object and a transaction implementation dynamic base object.

18.   The system for providing distributed functionality as described in claim 17, wherein the transaction interface dynamic base object is embedded in a request dynamic base object and the transaction implementation dynamic base object resides on a third digital information appliance

19.   A method for optimally selecting an object in a distributed object system, comprising:

monitoring utilization of an appliance;

storing object utilization information for identifying previously performed tasks;

determining whether to utilize a previously performed task; and in the event it is determined to utilize a previously performed task, loading a corresponding object for executing the previously performed task.

20.   The method as described in claim 19, wherein the object includes a dynamic base object.